

REMARKS

Claims 1-15 are currently pending, with claims 1, 8 and 15 being the only independent claims. Independent claims 1, 8 and 15 have been amended. Support for the amendment may be found at pg. 4, lines 12-13 and pg. 8, lines 11-13 of the originally filed specification. No new matter has been added. Reconsideration of the application, as amended, is respectfully requested.

Independent claim 15 was added in Applicant's prior amendment filed August 22, 2005. There is no indication in the November 14, 2005 Office Action that independent claim 15 has been entered and considered. A notice to this effect is requested.

In the November 14, 2005 Office Action, independent claims 1 and 8, and dependent claims 2-7 and 9-14 were rejected under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 5,381,976 ("*Lin*") in view of U.S. Patent No. 6,348,376 ("*Elliott*"), and further in view of U.S. Patent No. 6,405,043 ("*Jensen*"). For the reasons that follow, it is respectfully submitted that all claims of the present application are patentable over the cited references.

The Examiner concedes that the combination of *Lin* and *Elliott* fails to disclose predetermining, for each base station, a classification according to a probability of interference at the channel with other bases stations of the plurality of base stations. As a result, *Jensen* has been cited to address the failure of *Lin* and *Elliott* to teach this limitation.

Jensen is directed to a computer implemented process which compares signals communicated between a known position and a plurality of base stations in a cellular telephone system to determine the level of interference with a signal on a channel expected to serve the known position, and which determines a value indicating a probability of interference with a signal on a channel expected to serve the known position (see col. 5, lines 1-10).

The Office Action (pg. 3) states:

Jensen teaches, in an analogous art, that predetermining, for each base station, a classification for each channel according to the probability of interference at the channel with other base stations of the plurality of base stations. (i.e. probability ... interference; Col.11; 20-42 and Col.12; 7-43) at the channel with other base stations of the plurality of [base] stations; (i.e. chose the best channel; Col.13; 4-19).

Jensen fails to teach or suggest amended independent claims 1, 8 and 15. *Jensen* (col. 7, lines 63 thru col. 8, lines 1) teaches a method that utilizes measured signal level data for an entire system to provide predictive plots, which may be utilized to establish cell site positions and channel

assignments. *Jensen* (col. 7, line 67 to col. 8, line 1) states, “the process allows plots and channel assignments to be easily changed at minimal cost whenever a system undergoes change”.

Jensen (Col. 8, lines 4-5) states, “the process begins with a drive test of the entire system”. *Jensen* (col. 8, lines 15-17) states, “if an entirely new system is being designed, expected cell sites may be selected in any of a number of different ways such as by use of prior art predictive plotting software”. *Jensen* (col. 8, lines 22-23) states, “a mobile unit with a scanning receiver drives over all of the roads and highways of the entire system”. *Jensen* (col. 8, lines 23-27) states, “the mobile scanning receiver constantly scans and measures the strength (usually received signal power) of each test channel transmitted from each of the cell sites as the mobile unit moves”. *Jensen* (col. 8, lines 30-33) further states, “this provides strength measurements of frequencies generated by transmitters at all of the cell sites proposed to be included in the system which can be received at each point in the service area over which the mobile unit drives”. *Jensen* (col. 8, lines 36-41) states, “as the test continues, the signal strength measurements of all signals received (or all signals greater than a certain level) are recorded in a database by equipment in the mobile unit together with the position at which the signals were received”. Finally, *Jensen* (col. 8, lines 60-65) teaches the creation of a database of all the measured signal strengths that indicates the cell and sector from which each signal received by the mobile unit was sent. Thus, *Jensen* teaches that signal levels for an entire system are determined and stored for subsequent use in time.

Jensen (col. 10, lines 52-57) states, “not only may the process be used to update or plan a new system, the process also allows signal strength measurements derived from drive tests conducted using a particular type of cellular system such as an AMPS to be used for determining coverage and interference patterns for cell sites utilized by entirely different types of systems. Thus, *Jensen* teaches how such a process may be used.

Jensen (col. 11, lines 21-26) states, “the improved process relates not only the strengths of carrier signals and signals which interfere with those carrier signals but also determines the probability of occurrence of the various interfering signals and the severity of the interference during receipt of the interfering signal”. *Jensen* (col. 11, lines 26-230) states, “this allows an interference value to be determined which essentially indicates the percentage of time a subscriber to a mobile system may expect to encounter perceptible interference at any point in the system”. However, amended independent claims 1, 8 and 15 state that the “classification is

performed according to the probability of interference ... upon a request of at least one mobile station to initiate communication via a base station”. The classification disclosed in *Jensen* is not performed in this manner.

Jensen (col. 11, lines 29-32) further states, “the interference values for points within a sector, cell, and system may be accumulated and averaged ... to provide an interference value for sectors, cells, and the system”. *Jensen* (col. 11, lines 32-36) teaches that this allows an operator to pinpoint sectors and cells which need to be improved and provides an overall evaluation of a system from which an operator may determine whether improvements need to be made. This improvement of the system is not performed upon a request of at least one mobile station to initiate communication via a base station, as recited in amended independent claims 1, 8 and 15. Rather, the *Jensen* system is improved as part of a design process that is performed by a human operator based on information that is acquired during a drive by test of the entire system (see col. 8, lines 23-27).

Jensen (col. 11, lines 36-38) teaches that the interference values for points in a system are used to evaluate the efficacy of each change to the system as it is proposed. Finally, *Jensen* (col. 11, lines 39-42) states, “each type of change which might be made may be compared to other types of changes in order to make the most economical changes possible”. Hence, *Jensen* teaches the use of probability factors in order to make changes to a system so as to alleviate interference problems in a system and to determine the effect of the change prior to its implementation. That is, the changes are made pursuant to prior system measurements that were made during a drive by test of the entire system. They are not performed immediately, i.e., in real-time.

The determination of the probabilities in *Jensen* is performed at a subsequent point in time to when all interference measurements were made, based on a database of previously measured signal levels for an entire system. In contrast, the claimed classification is “predetermined, for each base station, according to the probability of interference ... upon [the occurrence of] a request of at least one mobile station to initiate communication via a base station,” as recited in amended independent claims 1, 8 and 15. That is, this step occurs while the at least one mobile station is operating within a communication system. Consequently, *Jensen* fails to teach the present claimed invention.

In view of the foregoing, independent claims 1, 8 and 15 are patentable over *Lin*, either individually or in combination with *Elliott* and/or *Jensen*. Consequently, reconsideration and withdrawal of the rejection under 35 U.S.C. §103 are in order, and a notice to that effect is requested.

In view of the patentability of independent claims 1, 8 and 15, for the reasons set forth above, dependent claims 2-7 and 9-14 are all patentable over the prior art.

Respectfully submitted,

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